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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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FITZPATRICK CELLA HARPER & SCINTO
30 ROCKEFELLER PLAZA
NEW YORK, NY 10112

EXAMINER	
UHLENHAKE, JASON S	

ART UNIT	PAPER NUMBER
2853	

MAIL DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/767,738	IWATA, DAN	
	Examiner	Art Unit	
	JASON S. UHLENHAKE	2853	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *02 July 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,2,4-16 and 18-22* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2,4-16 and 18-22* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *30 January 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 7/2/2008 has been entered.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-2, 4, 15-16, 21-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bolash et al (U.S. Pat. 6,151,041) in view of Cook (U.S. Pat. 6,155,664)

Bolash discloses:

- ***regarding claims 1, 15,*** a printing apparatus for effecting printing using a recording head mounted thereto, the apparatus including communicating means for communication with an information processing apparatus, apparatus comprising:

- control means for determining a kind of device among a plurality of kinds in response to a predetermined operation for setting the kind of the printing apparatus, and operable for the kind thus determined (Abstract)

- discrimination means for discriminating whether the kind of device is determined or not (Column 2, Line 61 – Column 3, Line 8)

- communication control means for controlling communication with the information processing apparatus by the communicating means in accordance with a result of discrimination of the discrimination means (Column 2, Lines 43-55)

- when the discrimination means discriminates that the kind of device is determined, the communication control means permits the communicating means to communicate with the information processing apparatus without the detecting means detecting whether the recording head is mounted (Abstract; Column 2, Line 43-Column 3, Line 35)

- ***regarding claim 4,*** control means determines the kind of device of the printing apparatus by reading information relating to kinds of devices out of memory provided in the recording head in response to an operation of mounting the recording head to the printing apparatus (Column 10, Lines 15-30). It would be obvious to determine the kind of device of the printing apparatus in response to an operation of mounting the recording head as discloses by Bolash, for the purpose of determining the possible print head types for a variety of received image data.

Bolash does not disclose expressly the following:

- ***regarding claims 1, 15,*** detecting means for detecting whether or not the recording head is mounted; wherein when the discrimination means discriminates that the kind of device is not determined and the detecting means does not detect that the recording head is mounted, the communication control means prohibits the communicating means from communicating with the information processing apparatus

- ***regarding claims 2, 16,*** when the result of the discrimination is negative, the communication control means effects control so as not to respond to a command inquiring information on the kind of device received from the information processing apparatus

- ***regarding claims 21,22,*** wherein when the discrimination means discriminates that the kind of device I not determined and the detecting means detects that the recording head is mounted, the communication control means does not prohibit the communicating means from communicating with the information processing apparatus

Cook discloses:

- ***regarding claims 1, 15,*** detecting means for detecting whether or not the recording head is mounted; wherein when the discrimination means discriminates that the kind of device is not determined and the detecting means does not detect that the recording head is mounted, the communication control means prohibits the communicating means from communicating with the information processing apparatus (Column 7, Lines 17-40), for the purpose of verifying proper installation

- ***regarding claims 2, 16,*** when the result of the discrimination is negative, the communication control means effects control so as not to respond to a command inquiring information on the kind of device received from the information processing apparatus (Column 7, Lines 17-40), for the purpose of verifying proper installation

- ***regarding claims 21,22,*** wherein when the discrimination means discriminates that the kind of device I not determined and the detecting means detects that the recording head is mounted, the communication control means does not prohibit the communicating means from communicating with the information processing apparatus (Column 7, Lines 17-40), for the purpose of verifying proper installation. It is obvious when it is verified that the print head is properly installed, the memory on the print head will be accessed in order to determine the type of print head.

At the time the invention was made it would have been obvious to a person of ordinary skill in the art to incorporate the teaching of Cook into the device of Bolash, for the purpose of verifying proper installation

Claims 5-14, 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bolash et al (U.S. Pat. 6,151,041) as modified by Cook (U.S. Pat. 6,155,664) as applied to claim 1 above, and further in view of Nunokawa (U.S. Pat. 2003/0174180).

Bolash as modified by Cook discloses all the claimed limitations above except for the following:

- ***regarding claim 5,*** recording head is an ink jet head for effecting recording by ejecting ink said printing apparatus includes an ink container mounting

portion for detachably mountable mounting an ink container containing the ink and wherein the control means determines the kind of the printing apparatus by reading information of the kind of device stored in the memory which is provided in the ink container mounted to the ink container mounting portion

- ***regarding claim 6,*** recording head is an ink jet head for effecting recording by ejecting ink, said printing apparatus includes an ink container mounting portion for detachably mountable mounting an ink container containing the ink, for the purpose of achieving a print control program through an ink container, a print medium, or a print head

- control means checks correspondence between information on kind of device read out of head memory provided in a recording head mounted and information on the kind of device read out of container memory provided in the ink container mounted to the ink container mounting portion, and determines the kind when the kinds are discriminated as corresponding to each other

- ***regarding claim 7,*** discrimination means for discriminating a kind of recording head mounted to said apparatus, where in sad control means determines the kind of device of said printing apparatus in accordance with a kind of the recording head mounted

- ***regarding claim 8,*** recording head is an ink jet head for effecting recording by ejecting ink, said printing apparatus includes an ink container mounting portion for detachably mountable mounting an ink container containing the ink, and container discrimination means for discriminating a kind of said ink container

- control means determine kind of said printing apparatus on basis of result of discrimination of said recording head by said discrimination means and a result of discrimination of a kind of said ink container by said container discrimination means

- ***regarding claim 9,*** recording head is an ink jet head for effecting recording by ejecting ink, said printing apparatus includes an ink container mounting portion for detachably mountable mounting an ink container containing the ink

- wherein said control means determines a kind of said printing apparatus in accordance with a kind of said ink container mounted thereto

- ***regarding claim 10,*** storing means for storing setting information corresponding to kinds of devices with which said printing apparatus compatible, control means reads the setting information corresponding to the determined kind of device out of said storing means and controls said printing apparatus to operate the kind of device determined in accordance with the setting information

- ***regarding claim 11,*** storing means for storing information on the determined kind of device, wherein said discrimination means discriminates non-determination of the kind of device when said storing means does not have the information on the kind of device

- ***regarding claim 12,*** control means discriminates whether operations for setting the kind of device are in conformity with each other or not, and determines the kind of device of said printing apparatus when a result of discrimination is affirmative

- ***regarding claim 13,*** control means effects starting process within a range discriminatable by said discrimination means in the starting process upon actuation of a

main switch of said printing apparatus, after the discrimination of said discrimination means, said control means controls the apparatus so as to carry out another starting process

- ***regarding claim 14,*** control means does not effect a starting process for communication means in a starting process upon actuation of the main switch of said printing apparatus, and after discrimination means of said printing apparatus is determined or not, said control means controls the apparatus so as to carry out the starting process for said communicating means

- ***regarding claim 18,*** determining step determines the kind of device of said printing apparatus on the basis of information obtained from the recording head mounted thereto

- ***regarding claim 19,*** wherein said recording head effects the recording by ejecting ink, and wherein said determining step determines the kind of device of said printing apparatus on the basis of information obtained from the ink container mounted when said ink container containing the ink to be supplied to said recording head is mounted

- ***regarding claim 20,*** wherein said recording head effects recording by ejecting ink, and an ink container containing the ink to be supplied to said recording head is mountable to said printing apparatus, said determining step determines said printing apparatus when information obtained from said recording head mounted thereto and information obtained from the ink container mounted thereto correspond to each other

Nunokawa discloses:

- ***regarding claim 5,*** recording head is an ink jet head for effecting recording by ejecting ink said printing apparatus includes an ink container mounting portion for detachably mountable mounting an ink container containing the ink (Abstract, Paragraphs 0009 – 0013), and wherein the control means determines the kind of the printing apparatus by reading information of the kind of device stored in the memory which is provided in the ink container mounted to the ink container mounting portion (Paragraphs 0072 – 0073), for the purpose of performing printing using components that are suitable with one another.

- ***regarding claim 6,*** recording head is an ink jet head for effecting recording by ejecting ink (Paragraph 012), said printing apparatus includes an ink container mounting portion for detachably mountable mounting an ink container containing the ink (Abstract, Paragraphs 0009 – 0013), for the purpose of achieving a print control program through an ink container, a print medium, or a print head

- control means checks correspondence between information on kind of device read out of head memory provided in a recording head mounted (Paragraph 0164) and information on the kind of device read out of container memory provided in the ink container mounted to the ink container mounting portion (Paragraph 0155), and determines the kind when the kinds are discriminated as corresponding to each other (Paragraphs 0111 - 0112, 0189 – 0190), for the purpose of performing printing using components that are suitable with one another.

- ***regarding claim 7,*** discrimination means for discriminating a kind of recording head mounted to said apparatus, where in sad control means determines the kind of device of said printing apparatus in accordance with a kind of the recording head mounted (Paragraphs 0078 – 0083), for the purpose of performing printing using components that are suitable with one another.

- ***regarding claim 8,*** recording head is an ink jet head for effecting recording by ejecting ink (Paragraph 012), said printing apparatus includes an ink container mounting portion for detachably mountable mounting an ink container containing the ink (Abstract, Paragraphs 0009 – 0013), and container discrimination means for discriminating a kind of said ink container (Paragraphs 0072 – 0073)

- control means determine kind of said printing apparatus on basis of result of discrimination of said recording head by said discrimination means (Paragraphs 0078 – 0079) and a result of discrimination of a kind of said ink container (Paragraphs 0072 – 0073) by said container discrimination means (Paragraphs 0081 – 0083, 0160), for the purpose of performing printing using components that are suitable with one another.

- ***regarding claim 9,*** recording head is an ink jet head for effecting recording by ejecting ink (Paragraph 012), said printing apparatus includes an ink container mounting portion for detachably mountable mounting an ink container containing the ink (Abstract, Paragraphs 0009 – 0013), and container discrimination means for discriminating a kind of said ink container mounted to the apparatus (Paragraphs 0072 – 0073)

- wherein said control means determines a kind of said printing apparatus in accordance with a kind of said ink container mounted thereto (Paragraphs 0072 – 0074, 0081 – 0083), for the purpose of performing printing using components that are suitable with one another.

- ***regarding claim 10,*** storing means for storing setting information corresponding to kinds of devices with which said printing apparatus compatible, control means reads the setting information corresponding to the determined kind of device out of said storing means and controls said printing apparatus to operate the kind of device determined in accordance with the setting information (Paragraphs 0006, 0111), for the purpose of performing printing using components that are suitable with one another.

- ***regarding claim 11,*** storing means for storing information on the determined kind of device, wherein said discrimination means discriminates non-determination of the kind of device when said storing means does not have the information on the kind of device (Paragraphs 0193 – 0194), for the purpose of performing printing using components that are suitable with one another.

- ***regarding claim 12,*** control means discriminates whether operations for setting the kind of device are in conformity with each other or not, and determines the kind of device of said printing apparatus when a result of discrimination is affirmative (Paragraphs 0006, 0111), for the purpose of performing printing using components that are suitable with one another.

- ***regarding claim 13,*** control means effects starting process within a range discriminatable (Paragraph 0111) by said discrimination means in the starting process

upon actuation of a main switch of said printing apparatus (Paragraph 0143 – 0144), after the discrimination of said discrimination means, said control means controls the apparatus so as to carry out another starting process (Paragraphs 0067, 0098, 0193), for the purpose of performing printing using components that are suitable with one another.

- ***regarding claim 14,*** control means does not effect a starting process for communication means in a starting process upon actuation of the main switch of said printing apparatus, and after discrimination means of said printing apparatus is determined or not, said control means controls the apparatus so as to carry out the starting process for said communicating means (Paragraph 0193), for the purpose of performing printing using components that are suitable with one another.

- ***regarding claim 18,*** determining step determines the kind of device of said printing apparatus on the basis of information obtained from the recording head mounted thereto (Paragraphs 78 – 83), for the purpose of performing printing using components that are suitable with one another.

- ***regarding claim 19,*** wherein said recording head effects the recording by ejecting ink (Paragraph 0012), and wherein said determining step determines the kind of device of said printing apparatus on the basis of information obtained from the ink container mounted when said ink container containing the ink to be supplied to said recording head is mounted (Paragraphs 0072 – 0074), for the purpose of performing printing using components that are suitable with one another.

- ***regarding claim 20,*** wherein said recording head effects recording by ejecting ink (Paragraph 0012), and an ink container containing the ink to be supplied to said recording head is mountable to said printing apparatus (Paragraph 0013), said determining step determines said printing apparatus when information obtained from said recording head mounted thereto and information obtained from the ink container mounted thereto correspond to each other (Paragraphs 0111 - 0112), for the purpose of performing printing using components that are suitable with one another.

At the time the invention was made it would have been obvious to a person skilled in the art to incorporate the teaching of Nunokawa into the device of Bolash as modified by Cook, for the purpose of performing printing using components that are suitable with one another.

Response to Arguments

Applicant's arguments with respect to claims 1-2, 4-16, 18-22 have been considered but are moot in view of the new ground(s) of rejection. Please see the above rejection regarding Bolash et al (U.S. Pat. 6,151,041).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason Uhlenhake whose telephone number is (571) 272-5916. The examiner can normally be reached on Monday - Friday 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Meier can be reached on (571) 272-2149. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/JASON S UHLENHAKE/
Examiner, Art Unit 2853
August 29, 2008

/Julian D. Huffman/
Primary Examiner, Art Unit 2853